SOUTH AFRICAN RADIO LEAGUE NEWS SUNDAY 21 JUNE 2015

Good morning and welcome to the weekly news bulletin of the South African Radio League read by [your name, call sign and QTH]

You can tune into the South African Radio League news bulletin on Sunday morn-ings at 08:15 Central African Time in Afrikaans and at 08:30 Central African Time in English on HF and on many VHF and UHF repeaters around our country. Echolink listeners can connect to ZS0JPL for a relay. A podcast is available from the League web site.

This audio bulletin can be downloaded from the League website at www.sarl.org.za. You will find this bulletin and previous bulletins in text format under the news link on the left-hand side of the web page. While you are there, you can sign up to receive future bulletins by e-mail.

The SARL News Team wishes all Fathers a very special Father s Day. We would also like to remind listeners that the winter solstice will be at 18:30 CAT this afternoon. After that, we are on our way back to summer!

In the news today

AN OPPORTUNITY TO EARN YOUR SARL TOP BAND CERTIFICATE SA AMSAT MAKES TOUGH DECISIONS ON KLETSKOUS

and

THE STANDARD FOR PHOTOVOLTAIC INVERTERS PROVIDES RELIEF

Stay tuned for more on these and other interesting news items.

** To obtain their SARL Top Band Certificate, South African stations must submit confirmation of having contacted at least six different Southern African call areas, of which at least five must be in the Republic of South Africa. The sixth contact can be one of the remaining South African call area, or any of the bordering countries - Botswana, Lesotho, Mozambique, Namibia, Swaziland or Zimbabwe.

The League's Top Band QSO Party runs from 00:00 UTC on Thursday 25 June 2015 to 00:00 UTC on Monday 29 June 2015 with CW activity from 1 810 to 1 838 kHz and phone activity from 1 840 to 2 000 kHz. The exchange is an RS or RST report and provincial or country abbreviation. The frequency of each QSO must be shown on the log sheet.

Each station can be worked once per mode i.e. once on Phone and once on CW. Each contact will count three points. Bonus Points - each South African call area and each DXCC country worked will be awarded with five bonus points. The total score equals (total QSO points) plus (bonus points). Log sheets must be submitted by 6 July 2015 by e-mail to contest@sarl.org.za.

** The ZS90SARL call sign is going to be active until 31 December 2015. To date, 12 159 contacts have been made with 4 515 confirmations according to

Logbook of the World. ZS90SARL has already achieved a mixed mode DXCC and is six more confirmations away from a CW DXCC. If you would like to operate ZS90SARL, please send an e-mail to sarl90@sarl.org.za giving the dates of operation.

** At the pre-conference Engineering meeting held on Friday evening, members of the SA AMSAT CubeSat team made some tough decisions. During the past few years, various options and subsystems have been experimented with.

The team has now set the launch date of Kletskous at July 2017 with the first flight model to be ready by February 2016 for testing after which final integration will start. This requires that various module designs are locked down and built by October 2015. It is planned to have all the modules wired together in a breadboard configuration for testing the interoperation of the various subunits by December 2015. Some modules are at a more advanced stage than others, but in the next few months, the team expect to catch up and meet the deadline for the first breadboard test.

Frik Wolff, ZS6FZ, the League's technical manager, has joined the team and is working on solar panels and stabilisation issues. Francois Oberholzer, an honours student at Stellenbosch University, is working on improving the weight/strength relationship of the space frame, a project that is part of his thesis. Nico van Rensburg, ZS6QL, as programme manager and the person responsible for documentation, will support the project manager, Hannes Coetzee, ZS6BZP.

There are many opportunities for radio amateurs to join the engineering team. If you have a particular expertise or passion to add value to the KLETSKOUS project, please discuss your participation with Hannes Coetzee or any of the team members and send your details to saamsat@intekom.co,za. There will be a fuller discussion about KLETSKOUS in Amateur Radio today later this morning.

** Mike Bosch, ZS2FM, asks, "How big is the universe?" When the Big Bang inflated, it was surrounded by a bubble of infrared radiation - heat, which expanded at the speed of light, the same speed as radio waves, ultraviolet rays, X-rays and gamma rays. Since this infrared bubble travelled away from us, the Doppler shift changed its wavelength from infrared to microwaves. It was accidentally discovered by radio astronomers as the Cosmic Microwave Background radiation on a wavelength of 7,35 centimetres and a temperature of 2,7 Kelvin at a distance of 13,8 billion light years from us. This means that we were surrounded by a Cosmic Microwave Background bubble, with a radius of 13,8 billion light years and a diameter of 28 billion light years, dating back to 13,8 billion years ago. By now, the Cosmic Microwave Background bubble has expanded the observable Universe in the microwave spectrum to a radius of 46 billion light years and a diameter of 92 billion light years. A light year is equal to 9,460 billion kilometres.

You are listening to a news bulletin of the South African Radio League.

** The Standard for photovoltaic inverters provides relief. The CISPR 11 standard with the catchy title "Industrial, scientific and medical equipment - Radio disturbance characteristics - Limits and methods of measurement" covers power electronic devices such as solar inverters. Although there were voltage limits for conducted emissions at the mains port in the past, limits for the connections to the solar cells were missing.

After a positive vote of the international standard bodies, CISPR 11 Ed.6.0 is about to appear officially. In this new version, limits finally apply (74 dBuV between 500 kHz and 30 MHz) for the DC terminals, in particular for systems up to 20 kVA in resi-dential environments (Class B).

Through intensive work of the IARU in the standardization bodies during the last 5 years, this goal has now finally been achieved. "But the work in terms of photovoltaic does not end here," said Thilo Kootz, DL9KCE, EMC Coordinator of IARU. "The limits are currently being validated by checking the emissions of installations in a computer model. It is possible that limits will be readjusted after this validation phase. With the current limit, however, a reasonable protection for shortwave reception has already been achieved."

** The ARRL Kids Day. If you hear the call CQ Kids Day today, it will be part of the ARRL's Kids Day on Sunday 21 June from 18:00 to 23:59 UTC. Kids Day is a way to introduce young people to the magic of amateur radio in the USA by getting them on the air. Young people will be getting on the air from amateur stations all over the USA, so please give them a call and help these potential new recruits into the hobby.

** The results of the AWA Valve QSO party held on 09 and 10 May 2015 have been released. There were 19 stations logged on AM but only 1 log received. On SSB, there were 65 stations logged but 6 logs received!

AM Section 1st Jan Botha, ZS4JAN - 27 points

SSB Section 1st Jan Botha, ZS4JAN 176 points 2nd Mario Beltrame, ZS6MAR 132 points 3rd Stephen van Jaarsveldt, ZS6SVJ 72 points

Congratulations to all those who made the days such a success.

** The provisional results of the All Africa All Mode DX contest held in March 2015 have been released. Visit http://ldrv.ms/leerUEg for the results or get a copy of HF Happenings newsletter 660.

One hundred and thirty two logs and four check logs were received for this inaugural contest. Only fourteen logs were received from local stations. Africa was represented by stations from South Africa and Namibia. We can only hope that there will be more activity next year especially from Africa.

** The Winter Flea Market of the East Rand Radio Club will be held from 12:00 CAT on Saturday 27 June 2015. You stand a chance to win a Daiwa CN-801 cross needle SWR/Power meter valued at R2 250 at the October 2015 flea market (thanks to Sam's Radio Accessories) for only R30 per raffle ticket.

The tickets will be on sale at the Winter Flea Market. Boerewors rolls and cold beverages will be available. Bring the family, come and enjoy the day with us. To book tables at R30 each, contact Judy on mobile 079 730 2030 or e-mail to zs6erb@gmail.com

** On Sunday 28 June, the Antique Wireless Association KZN Branch is having an open day at the Baynesfield Museum. There will be a display of antiques and all are invited to come along and enjoy the day with us and bring along any items you wish to display or dispose of. Activities begin at 09:00 and directions are available on the AWA Website at www.awasa.org.za. The contact in the area is Don, ZS5DR, on 082 416 8880 for any further information.

** In the propagation report, Hannes Coetzee, ZS6BZP, reports that the expected solar activity will be at moderate levels. Active sunspots AR2367 and 2371 have complex magnetic field configurations and may produce M- or X-class solar flares.

If you want to do your own frequency predictions, the expected effective sunspot number for the week will be around 97. The 20 to 15 m bands will provide lots of DX fun, especially during the late afternoons and in the evenings. Please visit the web-site spaceweather.sansa.org.za for further information.

And now for the diary of events

21 June The ARRL Kids Day Contest 25 to 29 June the SARL Top Band QSO Party 26 to 28 June Ham Radio in Friedrichshafen 27 June the East Rand Winter Flea Market 28 June the AWA KZN Branch Open Day at Baynesfield Museum 5 July the ZS5 Sprint 11 and 12 July The IARU HF Championships

To end this bulletin, a recap of our main news item this morning.

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Participate and earn your SARL Top Band Certificate.

** Clubs and individuals are invited to submit news items of interest to radio ama-teurs and shortwave listeners, if possible, in both English and Afrikaans, by following the news inbox link on the South African Radio League web page. News items for inclusion in the bulletin should reach the news team no later than the Thursday preceding the bulletin date.

You are welcome to join us every Sunday morning for the weekly amateur radio magazine programme 'Amateur Radio Today' at 10:00 Central African Time. The programme can be heard on VHF and UHF repeaters countrywide and on 7 082 kHz lower side-band and on 7 205 kHz and 17 760 kHz AM. There is also a podcast available from Dick Stratford, ZS6RO. A rebroadcast can be heard on Monday eve-nings at 18:30 Central African Time on 3 230 kHz AM.

We welcome your signal reports, comments and suggestions; send these by e-mail to artoday@sarl.org.za. Sentech sponsors the radio transmissions on the non-amateur frequencies.

You have listened to a news bulletin compiled by Dennis Green, ZS4BS, edited by Dave Reece, ZS1DFR, and read by $\,$..

From the entire news team, best wishes for the week ahead.

73's and thank you for listening

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